

Hydrologic Model Manager

Short Name	GHEM
Long Name	Global Hydrologic Evaluation Model
Description	
Model Type	Quasi-Three Dimensional
Model Objectives	Simulate hydrologic system response to hydroclimatic system perturbations in a Monte Carlo format.
Agency _Office	University of California Department of Civil and Environmental Engineering
Tech Contact	Michael Anderson Department of Civil and Environmental Engineering University of California, Davis Davis, CA 95616
Model Structure	Eigenfunction expansion of state variables
Interception	
Groundwater	
Snowmelt	
Precipitation	
Evapo-transpiration	
Infiltration	
Model Paramters	Atmospheric water content, quasi-geostrophic potential vorticity, land/sea surface temperature, hydrologic water storage; parameters for land cover, clouds, radiation absorption/emission, sensible heat, evaporation/condensation
Spatial Scale	5 degrees latitude by 5 degrees longitude
Temporal Scale	Daily time step with monthly or seasonal mean output
Input Requirements	Initial state variable amplitudes, Hydroclimatic perturbation data Computer Requirements: Workstation level computer (e.g. - SGI Origin 2000)
Computer Requirements	
Model Output	
Parameter Estimatr Model Calibrtn	Satellite data used for parameter estimation; Calibration to Observed Climatic Zonal Mean and Variance
Model Testing Verification	Site specific match to observed climatic parameters
Model Sensitivity	
Model Reliabiity	
Model Application	Hydrologic response over western continental United States to ENSO event
Documentation	Dissertation by M. Anderson
Other Comments	
Date of Submission	5/8/2001 2:06:13 PM
Developer	
Technical Contact	

Contact Organization